



STRATEGIC BUSINESS PLAN (SBP)

IEC/TC: TC 23	SECRETARIAT: Belgium	DATE: 2016-12-22
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Please ensure this form is annexed to the Report to the Standardization Management Board if it has been prepared during a meeting, or sent to the Central Office promptly after its contents have been agreed by the committee.

A. STATE TITLE AND SCOPE OF TC

Title: TC 23: Electrical accessories

Scope

To coordinate between the different subcommittees of TC 23 and with other technical bodies within and outside IEC, aspects concerning safety, EMC, coordination, compatibility interoperability, interchangeability, and energy efficiency for electrical accessories contributing to the global management of the electrical energy

To prepare standards for electrical accessories and related systems, for AC and DC, for household and similar purposes, the word “similar” including locations such as offices, commercial and industrial premises, hospitals, public buildings, etc.

These accessories and related systems are :

- intended for fixed installations, or for use in or with appliances and other electrical or electronic equipment, and may include electronic components.
- normally installed by instructed or skilled persons and are normally used by ordinary persons.

It includes in particular the following products, systems and aspects, handled by the Technical Committee or Subcommittees depending on their nature:

- adaptors
- appliance couplers
- automatic reclosing devices
- cable reels
- cable trunking systems
- cable ducting systems
- cable support systems
- circuit breakers for overcurrent protection
- conduit systems
- connecting devices
- contactors
- cord extension sets and cord sets
- Devices for the Connection of Luminaires (DCLs)
- devices mitigating the risk of fire due to the effect of arc fault currents
- devices protecting against electric shock
- electrical Energy Efficiency products
- enclosures for accessories
- guidance for additional functions for protection devices
- HBES switches and related accessories for use in Home and Building Electronic Systems (HBES)
- Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS)
- plugs and socket-outlets

- Power frequency overvoltage protection devices.
- switches (mechanical and electronic)

Note 1: For the terms "skilled persons", "instructed persons" and "ordinary persons", see Publication IEC 61140; 3.30, 3.31 and 3.32

New standards for new products, systems or aspects as mentioned under section C of this SBP are already included in the present scope.

Due to the need for these new standards and as electrical accessories and related systems are fundamental parts of the building infrastructure, this will definitely require coordination/cooperation with TCs, such as TC 21, TC 22, TC 34, TC 57, TC 61, TC 64, TC 72, TC 82 and TC 108.

New trends in technology and in the market as mentioned in section E are not yet covered by the present scope.

B. MANAGEMENT STRUCTURE OF THE TC

Detailed information about the scopes of the technical committee and the subcommittees

TECHNICAL COMMITTEE 23: ELECTRICAL ACCESSORIES

Publications handled by TC 23 are:

a) Standards for single phase and multiphase installation couplers intended for permanent connection in fixed installations with a rated voltage up to and including 500 V a.c. and a rated connecting capacity up to and including 10 mm² in indoor electrical installations.

b) Standards for sound signalling devices with integral enclosures or sound signalling devices intended to be fitted into or supplied with enclosures according to IEC 60670 intended for household and similar purposes with rated voltages greater than 50 V a.c. or 75 V d.c. and not exceeding 250 V a.c. or 250 V d.c., and with rated power inputs not exceeding 100 VA.

c) Standards for clamping units for connecting devices for the connection of electrical conductors having a cross-sectional area of 0,2 mm² up to and including 35 mm² copper conductors and up to and including 50 mm² aluminium conductors with a rated voltage not exceeding 1000 V a.c. and 1500 V d.c. intended for household and similar purposes.

d) Standards for connecting devices as separate entities for the connection of two or more electrical conductors having a cross-sectional area of 0,2 mm² up to and including 35 mm² copper conductors and up to and including 50 mm² aluminium conductors with a rated voltage not exceeding 1000 V a.c. and 1500 V d.c. intended for household and similar purposes.

e) Standards for male and mating female flat quick-connect terminations for use as either an incorporated or an integrated part of an equipment or of a component, or as a separate entity, for connecting electrical copper conductors up to and including 6 mm² with a rated voltage not exceeding 1000 V a.c. and 1500 V d.c. intended for household and similar purposes.

f) Standards for Safety, EMC and installation aspects of Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS), in relation to TC23 electrical accessories.

- Electrical safety of HBES/BACS.
- Environmental Conditions and Requirements for HBES/BACS,
- Functional safety of HBES/BACS.
- EMC requirements and tests of HBES/BACS.
- Installation of HBES/BACS
- Use of HBES/BACS to manage electrical energy and to relate to external systems enabling smart grids, Active Assisted Living (AAL), security, entertainment and other applications

g) Guidelines for safety requirements and standards for electrical accessories for household and similar purposes intended for use in d.c. circuits, the word "similar" includes locations such as offices, commercial and industrial premises, hospitals, public buildings.

Note. This work is of interest for information technology applications, renewable energy applications etc.

h) Standards for Energy Efficiency Management systems, functions or solutions to be integrated or implemented in equipment products or devices of TC23 and its SCs either used in existing or new electrical installation - for optimizing the overall efficiency of a.c. or d.c. electrical energy for household and similar use.

The work on these publications also include considerations on system electrical energy performance,

energy supply, procurement practices for energy using equipment and systems, and energy use as well as measurement of current electrical energy usage.

The work covers the general principles, requirements and testing procedures for Energy Efficiency Management systems resulting from stand alone products or from any type of combination of devices and accessories aiming to manage, to monitor and to optimise the use of electrical energy within an electrical installation supplying energy to loads, either from the grid or from local energy production and/or storage (ILP&S).

It will take into account all technical and economic inputs and the overall interconnection and communication influencing the design and algorithms leading to managing, reducing, measuring, optimizing and monitoring the efficiency of electrical energy usage.

The work does not cover the drafting of product standards in hands of SC23K.

Note: The work covers combination of sensors, detectors, effectors, loads, control units, etc. aiming to optimize the efficiency of an electrical service from an energy point of view. For example a combination of sensors, control unit and heating/cooling devices for temperature control.

i) A technical report in view of the harmonisation of the general rules applied by TC 23 and its subcommittees

TC 23 has Group Safety Function for:

Connecting devices, either as separate entities or as integral parts of an end product, primarily for connecting external electrical supply conductors, for use with conductor cross-sectional area of 0,2 mm² up to and including 35 mm² copper conductors and up to and including 50 mm² aluminium conductors, but excluding connecting devices intended for data and signal circuits.

SUBCOMMITTEE 23A: CABLE MANAGEMENT SYSTEMS

Terms of reference:

To prepare international standards for products and systems used for the management of all types of cables, information and communication lines, electrical power distribution conductors and associated accessories.

Management includes support and/or containment and/or retention and/or protection against external influences.

SUBCOMMITTEE 23B: PLUGS, SOCKET-OUTLETS AND SWITCHES

Terms of reference:

a) To prepare safety and performance standards for general purpose switches including electronic switches, for example, time-delay switches, remote control switches and isolating switches with rated voltage not exceeding 440 V, and with a maximum rated current not exceeding 125 A, intended for household and similar purposes, either indoors or outdoors.

In particular, performance includes the energy consumption of 23B accessories.

The operation and control of the electronic switches can be achieved:

- intentionally by a person via an actuating member, a key, a card, etc., via a sensing surface or a sensing unit, by means of touch, proximity, turn, optical, acoustic, thermal etc.
- by physical means, e.g. light, temperature, humidity, time, wind velocity, presence and movement etc.
- by any other influence.

b) To prepare safety and performance standards for switches and related accessories for use in Home and Building Electronic Systems (HBES), with a working voltage not exceeding 250 V a.c. and a rated current up to and including 16 A, intended for household and similar purposes, either indoors or outdoors and to associated electronic extension units. An HBES switch is a device using two way communication designed to make or break and/or to control, directly (e.g. actuator) or indirectly (e.g. sensor), the current in one or more electric circuits. The communication can use different media e.g. Twisted Pair (TP), Power Line (PL), Infra Red (IR) and Radio Frequency (RF).

In particular:

- performance includes the energy consumption of 23B accessories.
- HBES switches can be used for the operation of lamp circuits and the control of the brightness of lamps (dimmers) as well as the control of the speed of motors (e.g. those used in ventilating fans) and for other purposes (e.g. heating installations),
- HBES switch are all kind of HBES devices e.g. switches, sensors, actuators, switched socket-outlets, associated electronic extension units, etc.
- The operation and control of the HBES switches are performed:
 - intentionally by a person via an actuating member, a key, a card, etc., via a sensing surface or a sensing unit, by means of touch, proximity, turn, optical, acoustic, thermal, etc.
 - by physical means, e.g. light, temperature, humidity, time, wind velocity, presence, movement, etc.
 - by any other influence, etc.
- And transmitted
 - by an electronic signal via several media, e.g. powerline (mains), twisted pair, optical fiber, radio frequency, infra-red, etc...

c) To prepare standards for plugs, fixed and portable socket-outlets, fused plugs, socket-outlets for appliances, switched socket-outlets with and without interlock, plugs and socket-outlets for SELV, with a rated voltage not exceeding 440 V and a rated current not exceeding 32 A, intended for household and similar purposes, either indoors or outdoors.

d) To prepare standards for boxes and enclosures for household devices, boxes and enclosures with provision for suspension means, connecting boxes and enclosures, floor boxes and enclosures, enclosures for housing protective devices and similar power consuming devices with a rated voltage not exceeding 1000 V a.c. and 1500 V d.c., intended for household and similar purposes, either indoors or outdoors. These standards are applicable to boxes, enclosures intended to house accessories which are in the field of other TC 23 subcommittees and are produced in conjunction with other subcommittees.

e) To prepare standards for ancillary products which are related to/incorporate in products covered by a), b), c), d) e.g. Devices for the Connection of Luminaires (DCLs), adaptors, cable reels, indicator light units, cord extension sets etc.

f) To prepare dimensional standards for an IEC system for plugs and socket-outlets for household and similar general purposes.

g) To elaborate the basic characteristics of a modular system, if possible suitable for all kinds of household installations and the definition of principles for its use.

h) To co-ordinate information for the introduction of the unified system and to make all efforts to ensure the harmonization of supplementary or transitional configurations necessary for certain countries, as stated by TC 64.

SUBCOMMITTEE 23E: CIRCUIT-BREAKERS AND SIMILAR EQUIPMENT FOR HOUSEHOLD USE

Terms of reference:

To prepare and to update standards for:

- circuit-breakers and residual current devices of rated currents not exceeding 125 A and rated voltages not exceeding 440 V for protection against overcurrent and/or against electric shock in domestic and similar installations,

- residual current monitors (RCM) for household and similar applications,
- circuit-breakers for equipment of rated currents not exceeding 125 A and rated voltages not exceeding 440 V designed to protect equipment for use in domestic and similar installations,
- electromechanical contactors for household and similar purposes,
- control and protection devices for electric vehicle supplies,
- arc fault detection devices (AFDD) of rated currents not exceeding 125 A and rated voltages not exceeding 440 V for household and similar uses.
- Guidance for additional functions for protection devices
- Automatic reclosing devices
- Power frequency overvoltage protection devices.

The standards concern devices intended to be used by ordinary persons in installations or equipment not subject to maintenance and contain all specifications necessary for certification purposes: sets of samples to be submitted, test sequences to be applied and conditions for approval.

They shall also include all specifications necessary for certification purposes concerning the groups of samples, the tests sequences each group shall be submitted and the number of failures admitted.

In working out such standards and according to the guidelines given by the SMB, close coordination is being kept continuously with SC 121A, dealing with the standards for low voltage switchgear and controlgear mainly intended to be used by instructed persons in installations subject to supervision and maintenance (In particular SC 121A is the leader for the preparation of standards for circuit breaker, whilst SC 23E is the leader for the preparation of standards for RCDs).

The work of the subcommittees takes into account the specifications prepared by TC 109, SC 77A and by TC 64.

An official liaison with CTL has been established by nominating a liaison member who is also member of the parallel WG in the CTL organization

SC 23E has Group Safety Function for: Residual Current Devices (RCDs)

Definition of Residual Current Devices taken from IEC 60755

a residual current device is a mechanical switching device designed to make, carry and break currents under normal service conditions and to cause the opening of the contacts when the residual current attains a given value under specified conditions

SUBCOMMITTEE 23G: APPLIANCE COUPLERS

Terms of reference:

To prepare standard sheets, tests and requirements for safety and interchangeability of alternating current and direct current couplers, which allow for detachable connections between flexible cords and electrical appliances or equipment, and between parts of multi-part appliances. The appliances or equipment may have a detachable input connection and also detachable output connections to other appliances or equipment. The couplers are not intended for use in fixed installations.

SUBCOMMITTEE 23H: PLUGS, SOCKET-OUTLETS AND COUPLERS FOR INDUSTRIAL AND SIMILAR APPLICATIONS, AND FOR ELECTRIC VEHICLES

Terms of reference

To prepare standards for plugs, socket-outlets and couplers suitable for use in industrial, commercial, private or public locations, either indoors or outdoors.

To prepare standards for other accessories such as, among others, industrial cable reels, intended for use with plugs, socket-outlets and couplers for industrial purpose.

To prepare standards for connecting devices intended for the connection of electric vehicles to the supply network and/or to dedicated supply equipment.

To prepare standards for connecting devices intended for the connection of ships to a shore supply.

The rated voltages of accessories covered by these standards lie within IEC 60038.

SUBCOMMITTEE 23J: SWITCHES FOR APPLIANCES

Terms of reference:

To prepare standards related to switches (mechanical, electromechanical or electronic) for appliances actuated by hand, by foot or by other human activity, to operate or control electrical appliances and other equipment for household or similar purposes with a rated voltage not exceeding 480 V and a rated current not exceeding 63 A.

It covers also switches intended to be incorporated in or with appliance equipment.

It covers also the general requirements and test methods for electromechanical switches with optional quality assurance procedures.

SUBCOMMITTEE 23K: ELECTRICAL ENERGY EFFICIENCY PRODUCTS

Terms of reference:

To prepare and to update standards for Energy Efficiency products, devices and solutions used within an efficient Management system of Electrical Energy in existing or new electrical installation which includes loads and/or local production and storage. These products provide functions including monitoring, measuring, controlling, managing and optimizing the overall efficiency use of a.c. or d.c. electrical energy for household and similar.

The work also includes equipment intended to improve electrical energy performance, energy supply, procurement practices for energy using equipment and systems, and energy use as well as measurement of current electrical energy usage.

The work addresses the requirements and testing procedures for electrical energy efficiency products or combinations of products, devices and solutions whose purpose is to monitor, to manage and to optimise the energy use of electricity within an electrical installation supplying energy to loads, either from the grid or from local energy production and/or storage.

The work does not cover requirements and testing procedures already covered by existing standards published in TC 23 and its SCs.

Note: For example if a switch or a circuit breaker covered by an IEC published standard from TC 23 or its SCs includes any function dealing with energy efficiency management (e.g. measurement, features for load shedding, transfer switch etc.) SC 23K will refer to these existing standards within a global system approach.

General comments about the management structure of TC 23

Due to the diversity within the scope of TC 23 and the market need for a coherent set of standards, the structure of the technical Committee with subcommittees is the most appropriate. Under diversity we refer to different industries providing different experts having different expertise and having different business models.

As the structure was reviewed in 2013, there is no need to review the structure at this moment in time

This review started during the Oslo meeting of TC 23 (2012-10) where TC 23 decided to set up SC 23K. This was ratified by the SMB, see document SMB/4991A/RV. SC 23 K deals with Electrical Energy Efficiency products.

After the Oslo meeting, TC 23 further reviewed its structure and at the end of 2012, TC 23 decided to disband SC 23C and SC 23F as there was no work ongoing for some time. It was decided to transfer the responsibilities for the SC 23C publications to SC 23B and to transfer the responsibilities for the SC 23F publications together with the responsibility on the Safety Group Function to TC 23.

General comment about new and emerging trends in technology

As the new and emerging trends in technology as mentioned under section E of this SBP are not completely covered by a generic approach within standardization, it is not clear if and how this will impact the scope and work activities of TC 23. This could have as a consequence that other TCs responsible to these generic standards might need to include this in their work activities.

TC 23 has established the AG 10 (Coordinating group) where all secretaries and chairs of the TC and SCs together with the convenors of the MT/PT/WG/AHG of TC 23 meet in order to coordinate the work.

In addition, TC 23 has established an editing committee. The members are the chair, the secretary and the convenor of the appropriate MT/PT/WG/AHG. Care is taken to always have an expert having English as native language.

C. BUSINESS ENVIRONMENT

Provide the rationale for the market relevance of the future standards being produced in the TC.

The diversity of electricity supply systems and local habits have to be taken into consideration and, as far as possible electrical accessories should be used without restriction whatever the electricity supply system, the type of wiring and the type of earthing system. These electrical accessories are incorporated in electrical installations which are intended to be used for a long period of time, they do not need maintenance.

The large demand of safety, comfort and reliable performances, together with the ever-growing worldwide trade calls for the largest possible acceptance of qualified standards. In this respect the SMB has approved the step by step plan proposed by TC 23. This allows TC 23 standards to be published in the largest number of countries aiming to ease the circulation of products.

In addition to these general objectives, TC 23 is working on several new standards in order to cover the following topics

-global energy management: energy efficiency

Due to the recent emphasis on the forecasted mid-term shortage of natural resources, growing environmental concerns (e.g. greenhouse gas problems), TC 23 started new work on an energy efficiency approach for TC 23 and its SCs and started new work on product standards facilitating the inclusion of new energy sources in electrical installation (energy efficiency products)

-HBES

Since the market is calling for several new applications (such as smart grid, energy efficiency infotainment, AAL), more communication and relevant new technologies are to be implemented, larger and secure data transfer is essential and automatisms are needed. This calls for new systems in home/office buildings where HBES can offer solutions.

-need for increased fire protection

TC 23 has a long experience related to the protection device to be installed in electrical installations. Recently work started on a protection against arc faults.

-EV

In the past, TC 23 has made major efforts providing standards for accessories needed for conductive charging. As the EV market has developed with different patterns and speed in different countries standardization of these accessories is becoming essential to create global market where it is becoming a growing application for electrical accessories.

-LED

The market demand for lighting products is undergoing a rapid and dramatic shift due to a disruptive new technology: LED based products. This does not only mean a drastic change for the lighting industry but does also heavily impact the lighting controls within the scope of TC 23. Standards have been updated to include this major change in behaviour of the light sources in close collaboration with experts of TC 34.

-LVDC

Discussions about LVDC started in TC 23 following a request from the ICT industry to connect their data center equipment to be supplied by 400 V LVDC to a fixed wiring by means of a plug and socket-outlet system. In the meantime, work on protective devices, appliance switches and appliance couplers are started all in coherence with the work done in SEG 4. In addition, following recent developments captures by SEG 4, work will be needed to support the deployment of solutions for electrical energy access in regions where no electrical grid is available.

If readily available, provide an indication of global or regional sales of products or services related to the TC/SC work and state the source of the data.

No National committees and Subcommittees of TC 23 have forwarded their views on this topic.

Specify if standards will be significantly effective for assessing regulatory compliance.

TC23 product standards are used for assessing regulatory compliance in countries such as Russia (EAC), Australia, New Zealand (RCM), China (CCC), Gulf (G-Mark), EU, etc...

D. MARKET DEMAND

Provide a list of likely customers of the standards (suppliers, specifiers, testing bodies, regulators, installers, other TC/SC's etc.). Do not specify company names, only categories of customers.

- Suppliers
- Manufacturers
- Certification Bodies, Testing Bodies,
- Market surveillance authorities
- Regulators
- Other TC/SCs
- Specifiers

E. TRENDS IN TECHNOLOGY AND IN THE MARKET

If any, indicate the current or expected trends in the technology or in the market covered by the products of your TC/SC.

New or emerging trends in technology that will impact the scope and work activities of TC23 are:

-Drastic changes of EM environment due to the increased use of wireless equipment, higher frequencies, and electronic devices in general.

-USB and wireless power transfer for fixed installation

Due to the energy efficiency requirements, equipment consumes less. The consequence is that a lot of the available equipment can be supplied by using USB. The market is demanding easy use and readily available USB ports in fixed installations compatible with the already standardized USB equipment.

-BIM - "Building Information Modelling"

-Cyber security and data privacy

Following the evolution of IoT, applications as AAL, smart grid, energy efficiency, data communication and data privacy and security becomes more and more important. In a way, relevant requirements will be applicable to these products and might need to be included in TC 23 standards

-Internet of things

IoT and connectivity technologies will impact most of Electrical Accessories as Manufacturers, Installer and End users are expecting them to become "Smart" Electrical Accessories that are able to communicating within the Home and Building and with the outside. This needs to be organized in a secure and efficient way. Additional requirements and compliance practices will need to be included in TC 23 standards

-AAL: Active Assisted Living

Where HBES can provide some of the solutions needed for AAL, other TC 23 products will be impacted. TC 23 standards will need to be updated with those requirements. In this respect, TC 23 awaits guidance from SyC AAL

-circular economy

This will also imply additional requirements to be included in TC 23 standards. In order to guarantee a coherent approach within standardisation, guidance is needed

-global energy management: storage, interaction with smart grid, renewable energy

TC 23 started work on a global approach to energy efficiency and on energy efficiency products. But new energy systems are emerging both in residential and building applications such as storage, photovoltaic sources, smart grid, demand response, increasing the need for Home & Building Energy Management systems and specific protection devices to manage dual source current

F. SYSTEMS APPROACH ASPECTS (REFERENCE - AC/33/2013)

Does your TC/SC have a need for a systems approach?

System aspect approach according to AC/37/2006

IEC/TC 23

Component / Product Committees (TC 23 role of customer)	IEC TC 8	Systems aspects for electrical energy supply
	IEC TC 20	Electric cables
	CLC TC 205	Home and Building Electronic Systems (HBES)
Component / Product Committees (TC 23 role of supplier)	CTL	Committee of Testing Laboratories
	IEC TC 61	Safety of household and similar electrical appliances
	IEC TC 64	Electrical installations and protection against electric shock
	IEC TC 69	Electric road vehicles and industrial trucks
Other committees (Close relation for safety issues)	ACOS	Advisory committee on safety
	ACEC	Advisory committee on electromagnetic compatibility
	ACEE	Advisory committee on energy efficiency
	ACEA	Advisory Committee on Environmental Aspects
	IEC TC 112	Evaluation and Qualification of Insulating materials and Systems
	IEC TC 111	Environmental standardization for electrical and electronic products and systems
	IEC TC 109	Insulation coordination for low-voltage equipment
	IEC TC 89	Fire hazard testing
	IEC TC 77	Electromagnetic compatibility
	IEC TC 72	Automatic controls for household use

IEC/SC 23A

Component / Product Committees (SC 23A role of customer)	IEC TC 8	Systems aspects for electrical energy supply
	IEC TC 20	Electric cables
Component / Product Committees (SC 23A role of supplier)	CTL	Committee of Testing Laboratories
	IEC TC 64	Electrical installations and protection against electric shock
Other committees (Close relation for safety issues)	IEC SMB SG1	Energy Efficiency and renewable resources
	ACOS	Advisory committee on safety
	ACEC	Advisory committee on electromagnetic compatibility
	ACEE	Advisory committee on energy efficiency
	ACEA	Advisory Committee on Environmental Aspects
	IEC SC 121B	Low-voltage switchgear and controlgear assemblies
	IEC TC 112	Evaluation and Qualification of Insulating materials and Systems
IEC TC 111	Environmental standardization for electrical	

		and electronic products and systems
	IEC TC 109	Insulation coordination for low-voltage equipment
	IEC TC 89	Fire hazard testing
	IEC TC 77	Electromagnetic compatibility
	CLC TC 213	Cable management systems

IEC/SC 23B

Component / Product Committees (SC 23B role of customer)	IEC SC 3C	Graphical symbols for use on equipment
	IEC TC 8	Systems aspects for electrical energy supply
	IEC TC 20	Electric cables
	CLC TC 205	Home and Building Electronic Systems (HBES)
Component / Product Committees (SC 23B role of supplier)	CTL	Committee of Testing Laboratories
	IEC TC 61	Safety of household and similar electrical appliances
	IEC TC 64	Electrical installations and protection against electric shock
	IEC TC 108	Safety of electronic equipment within the field of audio/video, information technology and communication technology
Other committees (Close relation for safety issues)	ACOS	Advisory committee on safety
	ACEC	Advisory committee on electromagnetic compatibility
	ACEE	Advisory committee on energy efficiency
	ACEA	Advisory Committee on Environmental Aspects
	IEC SC 121A	Low-voltage switchgear and controlgear
	IEC SC 121B	Low-voltage switchgear and controlgear assemblies
	IEC TC 112	Evaluation and Qualification of Insulating materials and Systems
	IEC TC 111	Environmental standardization for electrical and electronic products and systems
	IEC TC 109	Insulation coordination for low-voltage equipment
	IEC TC 89	Fire hazard testing
	IEC SC 77A/WG1	Electromagnetic compatibility - Low frequency phenomena - Harmonics and other low-frequency disturbances
	IEC TC 72	Automatic controls for household use
	IEC TC 69	Electric road vehicles and electric industrial trucks
	IEC TC 34	Lamps and related equipment
ACOS	Advisory committee on safety	

IEC/SC 23E

Component / Product Committees (SC 23E role of customer)	IEC TC 8	Systems aspects for electrical energy supply
	IEC TC 20	Electric cables

Component / Product Committees (SC 23E role of supplier)	CTL	Committee of Testing Laboratories
	IEC TC 61	Safety of household and similar electrical appliances
	IEC TC 64	Electrical installations and protection against electric shock
	IEC TC 69	Electric road vehicles and industrial trucks
Other committees (Close relation for safety issues)	ACOS	Advisory committee on safety
	ACEC	Advisory committee on electromagnetic compatibility
	ACEE	Advisory committee on energy efficiency
	ACEA	Advisory Committee on Environmental Aspects
	IEC SC 121A	Low-voltage switchgear and controlgear
	IEC SC 121B	Low-voltage switchgear and controlgear assemblies
	JWG 121A/121B	Device substitution
	IEC TC 112	Evaluation and Qualification of Insulating materials and Systems
	IEC TC 111	Environmental standardization for electrical and electronic products and systems
	IEC TC 109	Insulation coordination for low-voltage equipment
	IEC TC 89	Fire hazard testing
IEC SC 32B	Low-voltage fuses	
ISO/TC22/SC21	Electrically propelled road vehicles	

IEC/SC 23G

Component / Product Committees (SC 23G role of customer)	IEC TC 8	Systems aspects for electrical energy supply
	IEC TC 20	Electric cables
Component / Product Committees (SC 23G role of supplier)	CTL	Committee of Testing Laboratories
	IEC TC 61	Safety of household and similar electrical appliances
	IEC TC 34	Lamps and related equipment
	TC 108	Safety of electronic equipment within the field of audio/video, information technology and communication technology
Other committees (Close relation for safety issues)	ACOS	Advisory committee on safety
	ACEC	Advisory committee on electromagnetic compatibility
	ACEE	Advisory committee on energy efficiency
	ACEA	Advisory Committee on Environmental Aspects
	IEC SC 48B	Connectors
	IEC TC 89	Fire hazard testing
	IEC TC 109	Insulation coordination for low-voltage equipment
	IEC TC 111	Environmental standardization for electrical and electronic products and systems
IEC TC 112	Evaluation and Qualification of Insulating materials and Systems	

IEC/SC 23H

Component / Product Committees (SC 23H role of customer)	IEC TC 8	Systems aspects for electrical energy supply
	IEC TC 20	Electric cables
	IEC SC 17A	High-voltage switchgear and controlgear
	IEC SC 121A	Low-voltage switchgear and controlgear
	IEC SC 121B	Low-voltage switchgear and controlgear assemblies
	IEC SC 17C	High-voltage switchgear and controlgear assemblies
	IEC SC 18A	Electric cables for ships and mobile and fixed offshore units
	IEC TC 20	Electric cables
	IEC SC 32B	Low-voltage fuses
	IEC SC 23F	Connecting devices
	IEC SC 23G	Appliance couplers
	ISO TC 107	Metallic and other inorganic coatings
Component / Product Committees / Installations (SC 23H role of supplier)	CTL	Committee of Testing Laboratories
	IEC TC 18	Electrical installations of ships and of mobile and fixed offshore units
	IEC TC 64	Electrical installations and protection against electric shock
	IEC TC 69	Electric road vehicles and industrial trucks
	ISO TC 22	Road vehicles
	ISO TC 131/SC 5	Fluid power systems
Other committees (Close relation for safety issues)	ACOS	Advisory committee on safety
	ACEC	Advisory committee on electromagnetic compatibility
	ACEE	Advisory committee on energy efficiency
	ACEA	Advisory Committee on Environmental Aspects
	IEC TC 89	Fire hazard testing
	IEC TC 109	Insulation coordination for low-voltage equipment
	IEC TC 111	Environmental standardization for electrical and electronic products and systems
	IEC TC 112	Evaluation and Qualification of Insulating materials and Systems

IEC/SC 23J

Component / Product Committees (SC 23E role of customer)	IEC TC 8	Systems aspects for electrical energy supply
	IEC TC 20	Electric cables
Component / Product Committees (SC 23J role of supplier)	CTL	Committee of Testing Laboratories
	IEC TC 116	Safety of motor-operated electric tools
	IEC TC 108	Safety of electronic equipment within the field of audio/video, information technology and communication technology
	IEC TC 72	Automatic controls for household use
	IEC TC 62	Electrical equipment in medical practice
	IEC TC 61	Safety of household and similar electrical

		appliances
	IEC TC 34	Lamps and related equipment
Other committees (Close relation for safety issues)	ACOS	Advisory committee on safety
	ACEC	Advisory committee on electromagnetic compatibility
	ACEE	Advisory committee on energy efficiency
	ACEA	Advisory Committee on Environmental Aspects
	IEC TC 89	Fire hazard testing
	IEC TC 77	Electromagnetic compatibility
	IEC TC 109	Insulation coordination for low-voltage equipment
	IEC TC 111	Environmental standardization for electrical and electronic products and systems
	IEC TC 112	Evaluation and Qualification of Insulating materials and Systems

IEC/SC 23K

Component / Product Committees (SC 23K role of customer)	IEC TC 8	Systems aspects for electrical energy supply
	IEC TC 20	Electric cables
	IEC TC 22	Power electronic systems and equipment
	IEC PC 118	Smart grid user interface
	IEC TC 57	Power systems management and associated information exchange
Component / Product Committees / Installations (SC 23K role of supplier)	CTL	Committee of Testing Laboratories
	IEC TC 23 SCs	Electrical accessories
	IEC TC 64	Electrical installations and protection against electric shock
	SC 121A	Low-voltage switchgear and controlgear
	TC 32	Fuses
	SC 32B	Low-voltage fuses
Other committees (Close relation for safety issues)	ACOS	Advisory committee on safety
	ACEC	Advisory committee on electromagnetic compatibility
	ACEE	Advisory committee on energy efficiency
	ACEA	Advisory Committee on Environmental Aspects
	TC 65 JWG14	Energy Efficiency in Industrial Automation (EEIA)
	IEC TC 89	Fire hazard testing
	IEC TC 109	Insulation coordination for low-voltage equipment
	IEC TC 111	Environmental standardization for electrical and electronic products and systems
	IEC TC 112	Evaluation and Qualification of Insulating materials and Systems
	ISO TC 242	Energy Management

As the products in the scope of TC 23 are to be included in installations, incorporated in equipments or used together with these installations and equipment, there is a strong need for close coordination

and in certain cases a close collaboration. Seeing the complexity of the future installations with high level communication, interactions related to many different applications, a systems approach is essential.

Therefore, TC 23 is highly involved in the work of IEC ahG 66 on smart home/office buildings.

TC23 with WG12 Home and Building Electronic Systems, WG9 with Energy Efficiency, and SC23A with Cable Management Systems are developing a system approach.

If so:

Will the Systems work be in a single TC or in multiple TCs?

SC23A is mainly working within its perimeter

TC23 WG12 and TC23WG9 HBES and Energy Efficiency group are working or will work with multiple TCs:

For HBES , interfaces and/or product specific standards should be defined with TC108, TC72, TC 34 , TC59 , TC79, etc...). The work with System Committees for example Smart Energy , AAL, Smart Cities, will also be relevant to HBES.

For Energy Efficiency aspects of Electrical Accessories, System Committees like Smart Energy, Smart Cities, SEG4 and TC64 are relevant and cooperation with these committees is important.

Will a Systems Evaluation Group (SEG), Systems Committee (SyC), or Systems Resource Group be required?

Regarding HBES, the conclusions of SMB Adhoc group 66 are expected to define how to work in the future with the different TCs.

The situation is similar regarding SEG 4 conclusions related to LVDC

Is your TC/SC work of relevance to ISO?

ISO TC205 (HBES/BACS)

ISO TC 22 (EV), ISO/IEC JTC1 SC25 Interconnection of information technology equipment

Is or are there fora or consortia working in parallel to IEC? Is there a chance to integrate this work in your TC/SC?

No

This should not only be restricted to the customer/supplier relationships with other TC/SCs indicating types of co-operation (e.g. liaisons, joint working groups) but be of a more generic nature.

If there is no need for a systems approach as outlined in AC/33/2013, is it intended a TC would not be requested to report on general systems approach considerations such as customer/supplier relationships, liaisons, joint WGs, etc. as referenced in the system approach matrix illustrated in slide 14 of the presentation attached to AC/37/2006?

G. CONFORMITY ASSESSMENT

With reference to clause 6.7 of Part 2 of the ISO/IEC directives, are all your publications in line with the requirements related to conformity assessment aspects?

IEC TC 23 publications are in line with clause 6.7 of Part 2 of ISO/IEC Directives (beware of the version number of the Directive - Edition 5)

Will the TC/SC publications be used for IEC Conformity Assessment Systems (IECEE, IECEx, IECQ, IECRE)?

TC23 publications are widely used for IEC conformity Assessment schemes.

Will any of your standards include test specifications, reproducible test requirements, and test methods?

TC23 standard include test specifications, reproducible test requirements and test methods

Are there likely to be special conformity assessment requirements generated by any standards projects? If yes, list which projects.

As of today and in a near future, it is not likely that special conformity assessment requirements will be produced.

H. 3-5 YEAR PROJECTED STRATEGIC OBJECTIVES, ACTIONS, TARGET DATES

STRATEGIC OBJECTIVES 3-5 YEARS	ACTIONS TO SUPPORT THE STRATEGIC OBJECTIVES	TARGET DATE(S) TO COMPLETE THE ACTIONS
Collaborate with System Activities of IEC	Involve expert in SEG 4 , Smart Cities, Smart Energy, AAL and Ad'hoc 66.	On going
Ensure Global Market Relevance	Work on proposal from National Committees.	To be defined according to the proposals made.
Complete product standard for LVDC and collaborate with SEG4 to cover the gaps analysis made by SEG4.	Finalise product standard in progress and propose NPs if necessary	Ongoing
Propose common rules on Energy Efficiency of electrical accessories, Write specific product standard when needed	In progress in WG9 and SC23K. To detect needs together with Smart Energy System Committee, close gaps if necessary	Ongoing
Finalise product standard needed for Electrical Vehicle charging.	Collaborate with ISO TC22, IEC TC69 and IECTC64 to ensure a coherent set of standards for	Within 2 years

	electrical vehicle charging	
Analyse the need for Cybersecurity and data privacy additions in TC23 standards or not	Collaborate with ISO/IEC JTC1 SC27 in order to have a coherent approach within TC23, Use WG12 work to understand how it should implemented in other SCs	Within 2 years
Collaborate with TC34 on Lighting system to find a clear border	Benefit from Adhoc 66 meetings to exchange in between TC23 and TC34	Ongoing
Collaborate with TC72 on requirements for fixed installation (Thermostats)	To identify the specific domain and overlaps, and align requirements on the overlapping part.	Meeting scheduled in 2016 with TC72 + Adapt standard in the next 3 years.

Agreed proposal and rationale on TC 23 scope extension

Background

At last TC 23CG, extension of TC 23 to address management systems was requested. The work on management systems will be allocated to TC 23 WG 12.

The following action was agreed:

ACTION

Claus-Dieter Ziebell, Beatriz Novel, Marco Peter and Nadine Bravais will propose an amendment to the scope of WG12 in order to include management systems.

AhG Scope enlargement of WG 12 "HBES" held two conference calls on 11th July and 29th August 2016, with the participation of Jürgen Kühnert, convenor of CENELEC TC 205/WG 18. The proposal below is the outcome of the discussions. Changes to the current scope are marked in red.

Proposal for changing the task of WG 12 (see IEC web site)

To prepare standards for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS), in relation to TC23 electrical accessories. In particular:

- Electrical safety of HBES/BACS.
- Environmental Conditions and Requirements for HBES/BACS
- Functional safety of HBES/BACS.
- EMC requirements and tests of HBES/BACS.
- Installation of HBES/BACS
- Use of HBES/BACS to manage electrical energy and to relate to external systems enabling smart grids, Active Assisted Living (AAL), security, entertainment and other applications.

Proposal for changing the scope of TC 23 (see IEC web site)

g) To prepare standards for Safety, EMC and installation aspects of Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS), in relation to TC23 electrical accessories.

- Electrical safety of HBES/BACS.
- Environmental Conditions and Requirements for HBES/BACS
- Functional safety of HBES/BACS.
- EMC requirements and tests of HBES/BACS.
- Installation of HBES/BACS
- Use of HBES/BACS to manage electrical energy and to relate to external systems enabling smart grids, Active Assisted Living (AAL), security, entertainment and other applications.

Rationale

- BACS have been added so as to be in line with the standards in preparation which address both HBES and BACS

- Management of electrical energy, for household and similar purposes, is the main application addressed by TC 23. HBES are contributors to manage electrical energy and enhance energy efficiency with support from WG9 and SC23 K. Standardisation work is needed in this field.
- As HBES allow for controlling and communicating within the premises (household and similar), they will most probably need to interact with other systems and third party services for other applications, e.g. AAL, Security, Entertainment. Therefore, standardization at interface level is in addition needed, in collaboration with the relevant TCs.

Scope agreed by TC 23 during its meeting in Frankfurt, 2016-10

Scope

To coordinate between the different subcommittees of TC 23 and with other technical bodies within and outside IEC, aspects concerning safety, EMC, coordination, compatibility interoperability, interchangeability, and energy efficiency for electrical accessories contributing to the global management of the electrical energy

To prepare standards for electrical accessories and related systems, for AC and DC, for household and similar purposes, the word “similar” including locations such as offices, commercial and industrial premises, hospitals, public buildings, etc.

These accessories and related systems are :

- intended for fixed installations, or for use in or with appliances and other electrical or electronic equipment, and may include electronic components.
- normally installed by instructed or skilled persons and are normally used by ordinary persons.

It includes in particular the following products, systems and aspects, handled by the Technical Committee or Subcommittees depending on their nature:

- adaptors
- appliance couplers
- automatic reclosing devices
- cable reels
- cable trunking systems
- cable ducting systems
- cable support systems
- circuit breakers for overcurrent protection
- conduit systems
- connecting devices
- contactors
- cord extension sets and cord sets
- Devices for the Connection of Luminaires (DCLs)
- devices mitigating the risk of fire due to the effect of arc fault currents
- devices protecting against electric shock
- electrical Energy Efficiency products
- enclosures for accessories
- guidance for additional functions for protection devices
- HBES switches and related accessories for use in Home and Building Electronic Systems (HBES)
- Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS)
- plugs and socket-outlets

- Power frequency overvoltage protection devices.
- switches (mechanical and electronic)

Note 1: For the terms "skilled persons", "instructed persons" and "ordinary persons", see Publication IEC 61140; 3.30, 3.31 and 3.32

New standards for new products, systems or aspects as mentioned under section C of this SBP are already included in the present scope.

Due to the need for these new standards and as electrical accessories and related systems are fundamental parts of the building infrastructure, this will definitely require coordination/cooperation with TCs, such as TC 21, TC 22, TC 34, TC 57, TC 61, TC 64, TC 72, TC 82 and TC 108.

New trends in technology and in the market as mentioned in section E are not yet covered by the present scope.

A lot of publications for these products, systems or aspects are handled by the subcommittees of TC 23. But some publications are under the direct responsibility of TC 23 due to their nature, such as:

- a) Standards for single phase and multiphase installation couplers intended for permanent connection in fixed installations with a rated voltage up to and including 500 V a.c. and a rated connecting capacity up to and including 10 mm² in indoor electrical installations.
- b) Standards for sound signalling devices with integral enclosures or sound signalling devices intended to be fitted into or supplied with enclosures according to IEC 60670 intended for household and similar purposes with rated voltages greater than 50 V a.c. or 75 V d.c. and not exceeding 250 V a.c. or 250 V d.c., and with rated power inputs not exceeding 100 VA.
- c) Standards for clamping units for connecting devices for the connection of electrical conductors having a cross-sectional area of 0,2 mm² up to and including 35 mm² copper conductors and up to and including 50 mm² aluminium conductors with a rated voltage not exceeding 1000 V a.c. and 1500 V d.c. intended for household and similar purposes.
- d) Standards for connecting devices as separate entities for the connection of two or more electrical conductors having a cross-sectional area of 0,2 mm² up to and including 35 mm² copper conductors and up to and including 50 mm² aluminium conductors with a rated voltage not exceeding 1000 V a.c. and 1500 V d.c. intended for household and similar purposes.
- e) Standards for male and mating female flat quick-connect terminations for use as either an incorporated or an integrated part of an equipment or of a component, or as a separate entity, for connecting electrical copper conductors up to and including 6 mm² with a rated voltage not exceeding 1000 V a.c. and 1500 V d.c. intended for household and similar purposes.
- f) Standards for Safety, EMC and installation aspects of Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS), in relation to TC23 electrical accessories.
 - Electrical safety of HBES/BACS.
 - Environmental Conditions and Requirements for HBES/BACS,
 - Functional safety of HBES/BACS.
 - EMC requirements and tests of HBES/BACS.
 - Installation of HBES/BACS
 - Use of HBES/BACS to manage electrical energy and to relate to external systems enabling smart grids, Active Assisted Living (AAL), security, entertainment and other applications

g) Guidelines for safety requirements and standards for electrical accessories for household and similar purposes intended for use in d.c. circuits, the word “similar” includes locations such as offices, commercial and industrial premises, hospitals, public buildings.

Note. This work is of interest for information technology applications, renewable energy applications etc.

h) Standards for Energy Efficiency Management systems, functions or solutions to be integrated or implemented in equipment products or devices of TC23 and its SCs either used in existing or new electrical installation - for optimizing the overall efficiency of a.c. or d.c. electrical energy for household and similar use.

The work on these publications also include considerations on system electrical energy performance, energy supply, procurement practices for energy using equipment and systems, and energy use as well as measurement of current electrical energy usage.

The work covers the general principles, requirements and testing procedures for Energy Efficiency Management systems resulting from stand alone products or from any type of combination of devices and accessories aiming to manage, to monitor and to optimise the use of electrical energy within an electrical installation supplying energy to loads, either from the grid or from local energy production and/or storage (ILP&S).

It will take into account all technical and economic inputs and the overall interconnection and communication influencing the design and algorithms leading to managing, reducing, measuring, optimizing and monitoring the efficiency of electrical energy usage.

The work does not cover the drafting of product standards in hands of SC23K.

Note: The work covers combination of sensors, detectors, effectors, loads, control units, etc. aiming to optimize the efficiency of an electrical service from an energy point of view. For example a combination of sensors, control unit and heating/cooling devices for temperature control.

i) A technical report in view of the harmonisation of the general rules applied by TC 23 and its subcommittees

TC 23 has Group Safety Function for:

Connecting devices, either as separate entities or as integral parts of an end product, primarily for connecting external electrical supply conductors, for use with conductor cross-sectional area of 0,2 mm² up to and including 35 mm² copper conductors and up to and including 50 mm² aluminium conductors, but excluding connecting devices intended for data and signal circuits.

Report on liaisons with other committees

During the TC 23 meeting held in Frankfurt on 14 October 2016, TC 23 agreed on the following liaisons. Some of these liaisons still need to be established. Some liaisons on an SC level will be handled on a TC level due to the fact that there are several committees within TC 23 that need a liaison with the other body. The second column indicates if the TC and which of the SCs need the liaison.

The following persons are indicated as being responsible for the liaison between TC23 or one of its subcommittees and other technical committees, subcommittees or organisations.

For some of the liaisons, there is not yet a liaison member appointed.

Liaisons		liaison member		Comment by IEC CO Established in database? (comments)	TC 23 decision Frankfurt
		At the one side	At the other side		
TC23 liaison with TC8	23, all SCs	Claus-Dieter Ziebell claus-dieter.ziebell@siemens.com	Secretary of TC 8 – Nicola Cammalleri nicola.cammalleri@enel.com	Not established. Was there a request? Is the secretary of TC 8 aware that she is the liaison officer?	To establish a liaison with TC 23 OK for the liaison officer
TC23 liaison with TC20	23, all SCs	Emmanuel Petit emmanuel.petit@legrand.fr	Helmut Myland Secretary TC 20 myland@zvei.org	Not established. Was there a request? Is the secretary of TC 20 aware that she is the liaison officer?	To establish a liaison with TC 23 OK for the liaison officer
TC23 liaison with SC32B	E, K	Claus-Dieter Ziebell claus-dieter.ziebell@siemens.com	Claus-Dieter Ziebell claus-dieter.ziebell@siemens.com	Established in TC 23 and SC 23E. Ludwig Birkl is not a member of TC/SCs 23 and Claus-Dieter Ziebell is not a member of SC 32B. I propose to remove their names as shown. Should the liaison be established between SC 23K and SC 32B? If yes, SC 23K secretary is to send a request for liaison to SC 32B Officers.	To disband the liaison SC 23E and SC 32B. As this liaison is only between 23K and 32B, the secretary of SC 23K is requested to follow this up.
TC23 liaison with TC34 and subcommittees	B, G	Rony Haentjens rony.haentjens@niko.be	Rony Haentjens rony.haentjens@niko.be	Established between: - SC 23B and TC 34	To establish a liaison with TC 23 OK for the liaison officer

				- SC 23G and SC 34D Rony Haentjens is the registered liaison officer from SC 23B <-> TC 34. There is no liaison established between TC 23 and TC 34.	To disband the SC23B and TC 34 SC 23G and SC 34D
TC23 liaison with TC61	B, G, J	Claus-Dieter Ziebell claus-dieter.ziebell@siemens.com	Secretary of TC 61 – Sonya M Bird Sonya.M.Bird@ul.com	Established in SC 23G and SC 23J. Not established in SC 23B	To establish a liaison with TC 23 OK for the liaison officer To disband the existing liaisons
TC23 liaison with TC64	23, all SCs	Claus-Dieter Ziebell claus-dieter.ziebell@siemens.com	Claus-Dieter Ziebell claus-dieter.ziebell@siemens.com	Established in TC 23 and SC 23E. Should the liaison be established with the rest of the SCs?	To establish a liaison with TC 23 OK for the liaison officer To disband the existing liaisons
TC23 liaison with TC69	B, E, H	Greg Nieminski silvergregn@verizon.net	Greg Nieminski silvergregn@verizon.net	Established in SC 23E and SC 23H. Not established in SC 23B.	To establish a liaison with TC 23 OK for the liaison officer To disband the existing liaisons
TC23 liaison with TC72	23, B	Gerold Widmer gerold.widmer@siemens.com	Gerold Widmer gerold.widmer@siemens.com	Established in TC 23 and SC 23B.	Ok To disband the liaison with 23B
TC23 liaison with SC77A	23, B, E, J, K	Didier Leblanc Didier.leblanc@legrand.fr	Hervé Rochereau herve.rochereau@edf.fr	Not established.	To establish a liaison with TC 23 OK for the liaison officer
TC23 liaison with TC 79	23	Andrea Basso andrea.basso@vimar.com	Andrea Basso andrea.basso@vimar.com	Not established.	To establish a liaison with TC 23 OK for the liaison officer
TC23 liaison with TC89	23, all SCs	Juan Manuel Benito jmbenito@unex.net	Juan Manuel Benito jmbenito@unex.net	Established in 23A and 23J.	To establish a liaison with TC 23 OK for the liaison officer To disband the existing liaisons with 23J Liaison with 23A remains till the next meeting where 23A will decide
TC23 liaison with TC108	23, B, G, J	Beatriz Novel Beatriz.novel@afme.es	Jean-Luc Detrez jean-luc.detrez@intel.com	Established in 23, 23G, 23J	To disband the existing liaisons with 23J and 23G
TC23 liaison with TC109	23, all SCs	Jean-François Rey jean-francois.rey@schneider-electric.com	Jean-François Rey jean-francois.rey@schneider-electric.com	Established in TC 23.	ok
TC23 liaison with TC111	23, all SCs	Philippe Vollet philippe.vollet@schneider-electric.com	Secretary of TC 111 – Andrea Legnani legnani@ceiweb.it	Not established. Was there a request?	The liaison is asked for. TC111 will decide at its Frankfurt meeting

				Is the secretary of TC 111 aware that he is the liaison officer?	
TC23 liaison with TC112	23, all SCs	Claus-Dieter Ziebell claus-dieter.ziebell@siemens.com	Bernd Goetter bernd-klaus.goetter@siemens.com Bernd Komanschek	Established in TC 23.	Ok
TC23 liaison with SC121A	B, E, H, K	Axel Bauer Axel.bauer@wago.com	Secretary SC 121A - Eric Bettega eric.bettega@schneider-electric.com	Established in 23E Is the secretary of SC121A aware that he is the liaison officer?	To establish a liaison with TC 23 OK for the liaison officer To disband the existing liaisons 23E
TC23 liaison with SC121B	A, B, E, H	Matteo Gavazzeni matteo.gavazzeni@gewiss.com	Matteo Gavazzeni matteo.gavazzeni@gewiss.com	Established in 23B, 23E	To establish a liaison with TC 23 OK for the liaison officer To disband the existing liaisons 23B and 23E
TC23 liaison with JTC1 SC 25	23	Jürgen Tretter tretterconsult@gmail.com	Jürgen Tretter tretterconsult@gmail.com	Not established	To establish a liaison with TC 23 OK for the liaison officer
TC23 liaison with CLC TC 205	23, B	Beatriz Novel Beatriz.novel@afme.es	Beatriz Novel Beatriz.novel@afme.es	CO not able to register such liaison. This has to be maintained by each TC/SC individually.	Follow up this liaison through the representation document
SC23A liaison with CLC TC213		Raj Vagdia Raj.Vagdia@beama.org.uk	Raj Vagdia Raj.Vagdia@beama.org.uk	CO not able to register such liaison. This has to be maintained by each TC/SC individually.	Follow up this liaison through the representation document
SC23B liaison with SC3C		Cristiano Masini cristiano.masini@bticino.it	Yoshikazu Seki Yoshikazu-seki@aist.go.jp	OK	Ok
SC23E liaison with SC3C		Giovanni Cassinelli giovanni.cassinelli@bticino.it	Yoshikazu Seki Yoshikazu-seki@aist.go.jp	OK	Ok
SC23E liaison with TC 82		To be appointed	To be appointed		Giovanni Cassinelli will update the secretary with the information
SC23E liaison with ISO/TC22/SC37		Giovanni Cassinelli giovanni.cassinelli@bticino.it	Fritzsche fritzsche@vda.de Horst Wunderlich horst.h.wunderlich@daimler.com	OK	Ok
SC23G liaison with SC48B		Ingvar Eriksson ingvar.eriksson@elstandard.se	Secretary of SC48B - Jeffrey R. Toran jeffrey.toran@fci.com	Established in 23G and 23H. Should liaison with 23H be removed? 23H to decide in Frankfurt.	Ok for 23G The secretary of SC 23H will ask SC 48B for the reason of the liaison so that SC 23H can decide

SC23H liaison with TC18		Bertrand Doignon b.doignon@marechal.com	Secretary of TC18- Arild Røed arild.roed@nek.no	OK	Ok
SC23H liaison with r		Bertrand Doignon b.doignon@marechal.com	Secretary of ISO/TC 131/SC5 – Alexandre Butaye a.butaye@unm.fr		
SC 23J liaison with TC 116					ok
SC23K liaison with TC 13		Philippe Vollet philippe.vollet@schneider-electric.com	Roland Hill roland.hill@landisgyr.com	Not established.	To establish a liaison with SC 23K by the secretary 23K OK for the liaison officer
SC23K liaison with TC 22		Philippe Vollet philippe.vollet@schneider-electric.com	Martial Patra martial.patra@schneider-electric.com	Not established	To establish a liaison with SC 23K by the secretary 23K OK for the liaison officer
SC23K liaison with TC 57		Philippe Vollet philippe.vollet@schneider-electric.com	Secretary TC 57 - Heiko Englert heiko.englert@siemens.com	Not established	To establish a liaison with SC 23K by the secretary 23K OK for the liaison officer
SC23K liaison with TC 65		Claus-Dieter Ziebell claus-dieter.ziebell@siemens.com	Claus-Dieter Ziebell claus-dieter.ziebell@siemens.com	Not established	To establish a liaison with SC 23K by the secretary 23K OK for the liaison officer
SC23K liaison with TC121		Matteo Gavazzeni matteo.gavazzeni@gewiss.com	Secretary TC 121 - Eric Betttega eric.betttega@schneider-electric.com	OK	Ok
SC23K liaison with ISO TC 242		Matteo Gavazzeni matteo.gavazzeni@gewiss.com	Secretary ISO TC 242 – Jason Knopes jknopes@ansi.org	Not established	To establish a liaison with SC 23K by the secretary 23K OK for the liaison officer

Report on representation of TC 23 and its subcommittees in committees

The following persons are indicated to represent TC23 or one of its subcommittees in other bodies.
For some of the cases, a representative still needs to be appointed.

Relation		Representative of TC23 and its SCs		Comments by IEC CO	TC 23 decision Frankfurt
		At the one side	At the other side		
TC23 representation in ACOS	23, all SCs	Claus-Dieter Ziebell claus-dieter.ziebell@siemens.com	Claus-Dieter Ziebell claus-dieter.ziebell@siemens.com		Noted
TC23 representation in ACEC	23, all SCs	Stefano Tomasina stefano.tomasina@bticino.it	Stefano Tomasina stefano.tomasina@bticino.it	TC 23 is not represented in ACEC	TC 23 decided there is a need to be represented. The secretary to write to the AC.
TC23 representation in ACSEC	23, all SCs	Jürgen Kuhnert juergen.kuhnert@schneider-electric.com	Jürgen Kuhnert juergen.kuhnert@schneider-electric.com	TC 23 is not represented in ACSEC	TC 23 decided there is a need to be represented. The secretary to write to the AC.
TC23 representation in ACEE	23, all SCs	Philippe Vollet philippe.vollet@schneider-electric.com	Philippe Vollet philippe.vollet@schneider-electric.com	TC 23 is represented in ACEE. Philippe Vollet is member of ACEE	Noted
TC23 representation in ACEA	All SCs	Philippe Vollet philippe.vollet@schneider-electric.com	Secretary of ACEA - Matei Cocimarov mco@iec.ch	TC 23 is not represented in ACEA	TC 23 decided there is a need to be represented. The secretary to write to the AC.
TC23 representation in CTL	23, all SCs	Wim De Kesel wim.de-kesel@legrandgroup.be	Silvio Piras, silvio.piras@sgs.com	There is no liaison status between IEC TC and CTL. Therefore we cannot register this in the EMS	Noted. This liaison will be followed up through the document on representatives. Action the Secretary
TC 23 representation in SyC smart energy	23				Ad hoc of TC 23 CG on SyC will look into possible representative to be proposed to TC 23
TC 23 representation in SyC smart cities	23				Ad hoc of TC 23 CG on SyC will look into possible representative to be proposed to TC 23
TC 23 representation in SyC AAL	23				Ad hoc of TC 23 CG on SyC will look into possible representative to be proposed to TC 23

TC 23 representation in SEG 4	23				Ad hoc of TC 23 CG on SyC will look into possible representative to be proposed to TC 23
TC23 representation in CLC TC 205	23, B	Beatriz Novel Beatriz.novel@afme.es	Beatriz Novel Beatriz.novel@afme.es	CO not able to register such liaison. This has to be maintained by each TC/SC individually.	Follow up this liaison through the representation document
SC23A representation in CLC TC213		Raj Vagdia Raj.Vagdia@beama.org.uk	Raj Vagdia Raj.Vagdia@beama.org.uk	CO not able to register such liaison. This has to be maintained by each TC/SC individually.	Follow up this liaison through the representation document

Annex 5 to the RSMB of TC 23 following the Frankfurt meeting in 2016/10
 The revised stability dates for SC 23A

Publication Number	Publication Date	Stability Date	Maintenance Team	Project in progress
IEC 61537 Ed. 2.0	2006-10-11	2018	MT12	IEC 61537 Ed. 3.0
IEC 61386-1 Ed. 2.0	2008-02-22	2016	MT 13	IEC 61386-1 am1 Ed. 2.0
IEC 61386-21 Ed. 1.0	2002-02-15	2020	MT 13	
IEC 61386-23 Ed. 1.0	2002-02-15	2020	MT 13	
IEC 61386-22 Ed. 1.0	2002-02-15	2020	MT 13	
IEC 61386-24 Ed. 1.0	2004-07-14	2020	MT 14	
IEC 62444 Ed. 1.0	2010-08-19	2020	MT 18	
IEC 61534-1 Ed. 2.0	2011-05-18	2020	MT 15	
IEC 61534-1 am1 Ed. 2.0	2014-06-30	2020	MT 15	
IEC 61534-21 Ed. 2.0	2014-06-19	2020	MT 15	
IEC 61534-22 Ed. 2.0	2014-06-19	2020	MT 15	

Annex 6 to the RSMB of TC 23 following the Frankfurt meeting in 2016/10
The revised stability dates for SC 23B

Stability dates for SC23B standards

Publication Number	Publication Date	Stability Date	Maintenance Team	Project in progress
IEC/TR 60083 Ed. 7.0	2015-10-29	2020		
IEC 60669-1 Ed. 3.1	2000-03-30			IEC 60669-1 Ed. 4.0
IEC 60669-1 fIS1 Ed. 3.0	2012-02-16			
IEC 60669-1 Ed. 3.0	1998-02-12	2016	MT 4	IEC 60669-1 Ed. 4.0
IEC 60669-1 Ed. 3.2	2007-01-31		MT 4	IEC 60669-1 Ed. 4.0
IEC 60669-1 am1 Ed. 3.0	1999-10-18	2016	MT 4	IEC 60669-1 Ed. 4.0
IEC 60669-1 am2 Ed. 3.0	2006-10-11	2016		IEC 60669-1 Ed. 4.0
IEC 60669-2-1 fIS1 Ed. 4.0	2011-12-15			
IEC 60669-2-1 Ed. 4.0	2002-09-17	2017	MT 6	
IEC 60669-2-1 Ed. 4.1	2009-01-28	2017	MT 6	
IEC 60669-2-1 fIS2 Ed. 4.0	2012-02-23			
IEC 60669-2-1 am1 Ed. 4.0	2008-10-08	2017	MT6	
IEC 60669-2-1 am2 Ed. 4.0	2015-03-30	2017	MT 6	
IEC 60669-2-2 Ed. 3.0	2006-08-29	2018	MT8	
IEC 60669-2-3 Ed. 3.0	2006-08-29	2018	MT8	
IEC 60669-2-4 Ed. 1.0	2004-05-06	2018	MT4	
IEC 60669-2-5 Ed. 1.0	2013-10-14	2017	MT 6	
IEC 60669-2-6 Ed. 1.0	2012-01-18	2018		
IEC 60670-1 Ed. 2.0	2015-03-10	2019	MT 5	
IEC 60670-21 Ed. 1.0	2004-04-27	2020	MT5	
IEC 60670-21 am1 Ed. 1.0	2016-02-19	2020	MT 5	
IEC 60670-22 Ed. 1.0	2003-05-22	2019	MT 5	
IEC 60670-22 am1 Ed. 1.0	2015-03-27	2019	MT5	
IEC 60670-23 Ed. 1.0	2006-04-13	2020	MT 5	
IEC 60670-23 am1 Ed. 1.0	2016-02-24	2020	MT 5	
IEC 60670-24 Ed. 2.0	2011-03-08	2020	MT 5	
IEC 60884-1 Ed. 3.0	2002-06-20	2017	MT 4	
IEC 60884-1 Ed. 3.1	2006-07-25	2017		
IEC 60884-1 am1 Ed. 3.0	2006-05-29	2017	MT4	
IEC 60884-1 am2 Ed. 3.0	2013-02-14	2017	MT 4	
IEC 60884-2-1 Ed. 2.0	2006-10-11	2018	MT4	
IEC 60884-2-2 Ed. 2.0	2006-10-11	2018	MT4	
IEC 60884-2-3 Ed. 2.0	2006-10-11	2018	MT4	
IEC 60884-2-4 Ed. 3.0	2007-11-21	2018	Secretary	
IEC 60884-2-5 Ed. 1.0	1995-07-28	2016	MT 09	IEC 60884-2-5 Ed. 2.0
IEC 60884-2-6 Ed. 1.0	1997-08-26	2018	MT 4	
IEC 60884-2-7 Ed. 1.0	2011-02-23	2018	MT 4	
IEC 60884-2-7 am1 Ed. 1.0	2013-06-21	2018	MT4	
IEC 60906-1 Ed. 2.0	2009-04-07	2018	MT to be setup if necessary	
IEC 60906-2 Ed. 3.0	2011-05-12	2018	MT to be setup if necessary	
IEC 60906-3 Ed. 1.0	1994-07-14	2018	MT to be setup if necessary	
IEC 61242 Ed. 1.0	1995-02-22	2020	MT 10	
IEC 61242 am1 Ed. 1.0	2008-01-30	2020	MT10	
IEC 61242 am2 Ed. 1.0	2015-10-29	2020	MT 10	
IEC 61995-1 Ed. 1.0	2005-03-02	2021	MT 13	
IEC 61995-1 am1 Ed. 1.0	2016-05-26	2021	MT 13	
IEC 61995-2 Ed. 1.0	2009-02-05	2021	MT 13	
IEC 61995-2 am1 Ed. 1.0	2016-05-19	2021	MT 13	

IEC 62094-1 Ed. 1.0	2002-10-09	2017	Secretary	
IEC/TR 63036 Ed. 1.0	2016-08-16	2017	No maintenance	

Annex 7 to the RSMB of TC 23 following the Frankfurt meeting in 2016/10
The revised stability dates for SC 23E

Publication Number	Publication Date	Stability Date	Maintenance Team	Project in progress
IEC/TR 60755 Ed. 2.0	2008-01-30	2016	WG 2	Replaced by IEC/IS 60755 Ed. 1.0
IEC 60898-1 Ed. 2.0	2015-03-23	2020	WG 1	
IEC 60898-2 Ed. 2.0	2016-08-17	2020	WG 1	
IEC 60934 Ed. 3.1	2007-03-30	2017	MT 9	IEC 60934 Ed. 4.0
IEC 60934 Ed. 3.0	2000-10-27	2017	MT 9	IEC 60934 Ed. 4.0
IEC 60934 am1 Ed. 3.0	2007-01-24	2017	MT 9	IEC 60934 Ed. 4.0
IEC 60934 am2 Ed. 3.0	2013-01-18	2017	MT 9	IEC 60934 Ed. 4.0
IEC 61008-1 Ed. 3.0	2010-02-11	2018	WG 2	
IEC 61008-1 am1 Ed. 3.0	2012-04-30	2018	WG 2	
IEC 61008-1 am2 Ed. 3.0	2013-09-12	2018	WG 2	
IEC 61008-2-1 Ed. 1.0	1990-12-17	2018	WG 2	
IEC 61008-2-2 Ed. 1.0	1990-12-17	2018	WG 2	
IEC 61009-1 Ed. 3.0	2010-02-11	2018	WG 2	
IEC 61009-1 am1 Ed. 3.0	2012-04-30	2018	WG 2	
IEC 61009-1 am2 Ed. 3.0	2013-09-12	2018	WG 2	
IEC 61009-2-1 Ed. 1.0	1991-09-15	2018	WG 2	
IEC 61009-2-2 Ed. 1.0	1991-09-15	2018	WG 2	
IEC 61540 Ed. 1.1	1999-03-11	2018	WG 2	
IEC 61540 Ed. 1.0	1997-08-26	2018	WG 2	
IEC 61540 am1 Ed. 1.0	1998-11-30	2018	WG 2	
IEC 61543 Ed. 1.0	1995-04-13	2018	WG 2	
IEC 61543 am1 Ed. 1.0	2004-08-27	2018	WG 2	
IEC 61543 am2 Ed. 1.0	2005-11-23	2016	WG 2	
IEC 62019 Ed. 1.0	1999-02-26	2018	WG 1	
IEC 62019 Ed. 1.1	2003-01-31	2018	WG 1	
IEC 62019 am1 Ed. 1.0	2002-11-28	2018	WG 1	
IEC 62020 Ed. 1.0	1998-08-19	2016	WG 2	IEC 62020 am2 Ed. 1.0
IEC 62020 Ed. 1.1	2003-11-21	2016	WG 2	IEC 62020 am2 Ed. 1.0
IEC 62020 am1 Ed. 1.0	2003-09-29	2016	WG 2	IEC 62020 am2 Ed. 1.0
IEC 62335 Ed. 1.0	2008-07-08	2018	WG 8	
IEC/TR 62350 Ed. 1.0	2006-12-14	2020	WG 2	
IEC 62423 Ed. 2.0	2009-11-20	2020	WG 2	
IEC 62606 Ed. 1.0	2013-07-09	2017	WG 2	IEC 62606 am1 Ed. 1.0
IEC 62640 Ed. 1.0	2011-01-31	2018	WG 2	
IEC 62640 am1 Ed. 1.0	2015-05-05	2018	WG 2	
IEC/TR 62710 Ed. 1.0	2015-05-05	2018	WG 2	
IEC 62752 Ed. 1.0	2016-03-04	2018	JWG 7	
IEC 62873-2 Ed. 1.0	2016-09-07	2020	WG 2	
IEC 62873-3-1 Ed. 1.0	2016-09-07	2020	WG 2	
IEC 62873-3-2 Ed. 1.0	2016-09-07	2020	WG 2	